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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,131	10/21/2001	Francisco M. Galanes	M61.12-0393	9228
69316	7590	11/05/2010		
MICROSOFT CORPORATION ONE MICROSOFT WAY REDMOND, WA 98052			EXAMINER LERNER, MARTIN	
			ART UNIT 2626	PAPER NUMBER
			NOTIFICATION DATE 11/05/2010	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DBOUTON@MICROSOFT.COM  
vffiling@microsoft.com  
stevensp@microsoft.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/046,131	<b>Applicant(s)</b> GALANES ET AL.	
	<b>Examiner</b> MARTIN LERNER	<b>Art Unit</b> 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3 to 56 is/are pending in the application.
- 4a) Of the above claim(s) 53 to 56 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3 to 52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Election/Restrictions*

Applicants' election without traverse of Group II, Claims 23 to 51, in the reply filed on 13 June 2008 is acknowledged.

Claims 53 to 56 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention. Election was made **without** traverse in the reply filed on 13 June 2008.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 4 to 8 are rejected under 35 U.S.C. 102(e) as being anticipated by *Dantzig et al.*

Regarding independent claim 1, *Dantzig et al.* discloses a system and method for generating multi-modal applications from markup scripts, comprising:

“a set of controls defined on an authoring page for a website for defining visual renderings and at least one of recognition and audible prompting on a client in a

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client/server system, each control having a first set of attributes defined on the authoring page related to visual rendering and a second set of attributes defined on the authoring page related to at least one of recognition and audibly prompting, wherein one of the second set of attributes for one of the controls relates to a grammar to use for recognition, the controls being related to client side markup executable by a client browser” – an XML (eXtensible Markup Language) script is implemented in a single authoring format (“an authoring page”) (column 5, lines 50 to 56); main renderer 14 of a multi-modal presentation manager 11 initiates a first processing thread comprising a GUI presentation manager 15 (“a first set of attributes related to visual rendering”) (column 7, lines 38 to 43: Figure 1); presentation of a graphic user interface (GUI) for an application defines a “visual rendering”; main renderer 14 of a multi-modal presentation manager 11 initiates a second processing thread comprising a speech renderer 16 (“a second set of attributes related to at least one of recognition and audibly prompting”), wherein the speech renderer 16 utilizes a plurality of speech engines 17 for speech recognition and text-to-speech synthesis (column 7, lines 38 to 47: Figure 1); one thread comprising a GUI presentation manager 15 is “related” to defining visual renderings on the client device because the thread initiates a visual modality; similarly, a second thread comprising a speech renderer 16 is “related” to defining desired operation on the client device because the thread initiates speech recognition or text-to-speech synthesis; a speech renderer utilizes grammars according to JSGF (Java Speech Grammar Format) for speech recognition (column 9, lines 31 to 39; column 16, lines 26 to 30); VoiceXML makes extensive use of grammars in order to optimize speech

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recognition functions (“wherein one of the second set of attributes for one of the controls relates to a grammar to use for recognition”) (column 10, lines 38 to 40);

“a module operable on a computer, the module being configured to receive the authoring page, and wherein the module is further configured to generate, using the first and second set of attributes provided from controls on the authoring page, client side markup executable by the client browser on the client in the server/client system in accordance with the controls and the attributes of the controls to perform both visual rendering and at least one of recognition and audibly prompting” – multi-modal presentation manager 11 controls an application on a web browser or a desktop (column 8, lines 32 to 35: Figure 1); implicitly, a web browser is executed on a client in a client/server architecture for receiving information from the Internet; a “single-authoring” system and method is an interaction-based programming paradigm for creating content as an intent-based markup script (column 5, line 20 to column 6, line 2; column 10, lines 24 to 28); thus, authoring for web-based presentation is on “an authoring page” at a client browser; main renderer 14 of a multi-modal presentation manager 11 initiates a first processing thread comprising a GUI presentation manager 15 (column 7, lines 38 to 43: Figure 1); presentation of a graphic user interface (GUI) for an application defines a “visual rendering”; main renderer 14 of a multi-modal presentation manager 11 initiates a second processing thread comprising a speech renderer 16, wherein the speech renderer 16 utilizes a plurality of speech engines 17 for speech recognition and text-to-speech synthesis (column 7, lines 38 to 47: Figure 1).

Regarding claim 4, *Dantzig et al.* discloses that controls relate to grammars for speech recognition (column 9, lines 31 to 39; column 16, lines 6 to 30).

Regarding claims 5 and 6, *Dantzig et al.* discloses that controls relate to XML (column 5, lines 50 to 56), VoiceXML (a form of XML) (Abstract), and WML (column 6, lines 56 to 62).

Regarding claims 7 and 8, *Dantzig et al.* discloses a speech renderer 16 generates audible output by text-to-speech synthesis (column 7, lines 42 to 45).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 9 to 46, and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Dantzig et al.* in view of *Ladd et al.* ('336).

Concerning independent claims 12, 23, and 52, *Dantzig et al.* discloses a system and method for generating multi-modal applications from markup scripts, comprising:

“a first set of visual controls defined on the authoring page having attributes defined on the authoring page related to a first modality of interaction with a user of the client that being visual renderings on the client device, the first set of controls being related to client side markup executable by a client browser” – main renderer 14 of a multi-modal presentation manager 11 initiates a first processing thread comprising a

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GUI presentation manager 15; an XML (eXtensible Markup Language) script is implemented in a single authoring format (“on an authoring page for a website”) (column 5, lines 50 to 56); presentation of a graphic user interface (GUI) for an application defines “visual renderings”; multi-modal presentation manager 11 controls an application on a web browser or a desktop (column 8, lines 32 to 35: Figure 1); implicitly, a web browser is executed on a client in a client/server architecture for receiving information from the Internet;

“a second set of controls defined on the authoring page having attributes defined on the authoring page related to a second modality of interaction with a user of the client that being at least one of recognition and audible prompting, . . . the second set of controls being selectively associated with the first set of controls, and the second set of controls being related to client side markup executable by a client browser” – main renderer 14 of a multi-modal presentation manager 11 initiates a second processing thread comprising a speech renderer 16, wherein the speech renderer 16 utilizes a plurality of speech engines 17 for speech recognition and text-to-speech synthesis (column 7, lines 38 to 47: Figure 1); an XML (eXtensible Markup Language) script is implemented in a single authoring format (“defined on an authoring page”) (column 5, lines 50 to 56); multi-modal presentation manager 11 controls an application on a web browser or a desktop (column 8, lines 32 to 35: Figure 1); implicitly, a web browser is executed on a client in a client/server architecture for receiving information from the Internet; in deferred rendering and presentation, a speech renderer 16 (“a second set of controls”) is “selectively associated with” GUI presentation manager 15 (“a first set of

controls”) because multi-modal presentation manager 11 automatically integrates and synchronizes voice synthesis and speech recognition functions with the presentation layer of applications (column 6, line 63 to column 7, line 8: Figure 1);

“a module operable on a computer, the module being configured to receive the authoring page, which includes a plurality of the second set of controls, wherein the module is further configured to process the plurality of the second set of controls from the authoring page to generate client side markup from the first and second set of controls that is executable by the client browser on the client in the server/client system in accordance with second set of controls and the attributes of the second set of controls for at least one of recognition and audibly prompting, and wherein the module is configured to use at least one of the first set of controls from the authoring page in order to generate markup therefrom when processing each of the second set of controls” – main renderer 14 of a multi-modal presentation manager 11 initiates a second processing thread comprising a speech renderer 16, wherein the speech renderer 16 utilizes a plurality of speech engines 17 for speech recognition and text-to-speech synthesis (column 7, lines 38 to 47: Figure 1); an XML (eXtensible Markup Language) script is implemented in a single authoring format (“the authoring page”) (column 5, lines 50 to 56); authoring produces content for both GUI presentation manager 15 and speech renderer 16 (column 7, lines 38 to 48).

Concerning independent claims 12, 23, and 52, *Dantzig et al.* discloses grammars in VoiceXML in order to optimize speech recognition functions (column 10, lines 38 to 56), but omits the limitations of “wherein attributes related to audible



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prompting include at least one of inline text for text-to-speech conversion, location of data for audible rendering and playing of a prerecorded audio file” and “wherein the attributes related to recognition include at least one of location of grammar for use in recognition and confidence level thresholds for recognition”. However, *Ladd et al.* (‘336) teaches a voice browser for interactive services, where a GRAMMAR input includes a SCR attribute that can be a grammar address (*i.e.*, a URL) for a markup language document: SCR = “gram//.SomeGrammar/month/year” (“location of a grammar for use in recognition”). (Column 20, Line 47 to Column 21, Line 1) Moreover, *Ladd et al.* (‘336) provides a voice browser, where a PROMPT element of the markup language is used to define content by <PROMPT> text </PROMPT> that is read by a text-to-speech unit, so that markup of <PROMPT> Please select a soft drink. </PROMPT> includes at least “inline text for text-to-speech conversion”. (Column 16, Line 63 to Column 17, Line 21; Column 18, Lines 33 to 39) An objective is permit users to access information from any location in the world via any suitable network access device. (Column 43, Lines 54 to 63) It would have been obvious to one having ordinary skill in the art to include markup attributes relating to a location of a grammar and inline text for text-to-speech conversion as taught by *Ladd et al.* (‘336) in a system and method for generating and presenting multi-modal applications from markup scripts of *Dantzig et al.* for a purpose of permitting users to access information from any location in the world via a suitable network access device.

Concerning independent claim 23, *Dantzig et al.* further discloses “wherein values of the second set of controls are synchronized with the first set of visual controls” – in one aspect, immediate synchronized rendering of the modality-independent document in each of the supported modalities is provided (Abstract); preferably, the multi-modal interface automatically synchronizes I/O events over the plurality of modalities presented (column 2, lines 50 to 53); multi-modal presentation manager 11 provides a runtime environment which integrates and synchronizes a plurality of ‘presentation interfaces’, enabling I/O events initiated at one ‘interface’ to be reflected across all interfaces; multi-modal presentation manager 11 provides a mechanism to automatically integrate and synchronize voice synthesis and speech recognition functions with the presentation layer of applications (column 6, line 65 to column 7, line 8: Figure 1).

Concerning claim 3, *Dantzig et al.* omits attributes for grammars and retrieving grammars from database locations. However, *Ladd et al.* (‘336) teaches attributes for grammars (column 13, lines 6 to 10), and retrieving grammars from database locations (column 12, lines 7 to 14; column 14, lines 18 to 28) for speech recognition. *Ladd et al.* (‘336) discloses a voice browser for interactive services, where a GRAMMAR input includes a SCR attribute that can be a grammar address (*i.e.*, a URL) for a markup language document: SCR = “gram//.SomeGrammar/month/year” (“location of a grammar for use in recognition”). (Column 20, Line 47 to Column 21, Line 1) An objective is permit users to access information from any location in the world via any

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suitable network access device. (Column 43, Lines 54 to 63) It would have been obvious to one having ordinary skill in the art to include markup attributes relating to a location of a grammar as taught by *Ladd et al.* ('336) in a system and method for generating and presenting multi-modal applications from markup scripts of *Dantzig et al.* for a purpose of permitting users to access information from any location in the world via a suitable network access device.

Concerning claims 9 to 11, *Ladd et al.* ('336) discloses determining an address for playing a prompt to a user (column 13, line 66 to column 14, line 17: Figure 5a: Steps 400, 402, 406); both recorded sound samples (column 15, line 63) and text to speech (TTS) (column 16, lines 11 to 20) are provided.

Concerning claims 13, 15, 24, and 26, *Dantzig et al.* discloses controls relate to grammars for speech recognition (column 9, lines 31 to 39; column 16, lines 6 to 30).

Concerning claims 14 and 25, *Ladd et al.* ('336) discloses attributes for grammars (column 13, lines 6 to 10), and retrieving grammars from database locations (column 12, lines 7 to 14; column 14, lines 18 to 28) for speech recognition.

Concerning claims 16 to 17, and 27 to 28, *Dantzig et al.* discloses controls relating to XML (column 5, lines 50 to 56), VoiceXML (a form of XML) (Abstract), and WML (column 6, lines 56 to 62).

Concerning claims 18 to 19, and 29 to 30, *Dantzig et al.* discloses a speech renderer 16 generates audible output by text-to-speech synthesis (column 7, lines 42 to 45).

Concerning claims 20 to 22 and 31 to 33, *Ladd et al.* ('336) discloses determining an address for playing a prompt to a user (column 13, line 66 to column 14, line 17: Figure 5a: Steps 400, 402, 406); both recorded sound samples (column 15, line 63) and text to speech (TTS) (column 16, lines 11 to 20) are provided.

Concerning claims 34 to 46, *Dantzig et al.* discloses a system and method for generating and presenting multi-modal applications from markup scripts for synchronizing a GUI presentation layer with voice synthesis and speech recognition, but omits details relating to "attributes providing a reference to a location", "a prerecorded audio data file", "an identifier of the associated control", "a question control", "an answer control", "binding the recognition value", and "a confirmation control". However, *Ladd et al.* ('336) teaches a voice browser for interactive services. An objective is permit users to access information from any location in the world via any suitable network access device. (Column 43, Lines 54 to 63) It would have been obvious to one having ordinary skill in the art to include details disclosed by *Ladd et al.* ('336) in a system and method for generating and presenting multi-modal applications from markup scripts of *Dantzig et al.* for a purpose of permitting users to access information from any location in the world via a suitable network access device.

Concerning claim 34, *Ladd et al.* ('336) discloses a markup language for text to speech; implicitly, when the text is displayed and the speech is produced for an audible prompt, there is an association of attributes between visual controls and audible controls.

Concerning claims 35 to 37, *Ladd et al.* ('336) discloses an option list in a markup language for controlling which choices are available at a network access apparatus (column 28, lines 9 to 60).

Concerning claim 38, *Ladd et al.* ('336) discloses a FORM input to collect an order in response to a prompt, and post the input to an address (column 20, lines 20 to 46); thus, a markup language controls a prompt, then activates an input, and then performs a post operation.

Concerning claims 39 to 43, *Ladd et al.* ('336) discloses a markup language for generating an audible prompt of a question and a grammar for an answer; an answer is followed by, and is activated by, a question prompt, where an answer is bound for recognition by <INPUT TYPE> (column 18, lines 40 to 55); a post operation is "an event related to operation of binding" (column 20, lines 28 to 46).

Concerning claims 44 to 46, *Ladd et al.* ('336) discloses a markup language for re-prompting ("repeating an audible prompt") (column 14, line 57 to column 15, line 16: Figure 5a: Steps 416, 425), and an attribute for confirming a recognition result (column 15, lines 45 to 54: Figure 5a: Step 452).

Claims 47 to 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Dantzig et al.* in view of *Ladd et al.* ('336) as applied to claims 23, 39, 40, 45, and 46 above, and further in view of *WCW Working Draft* ("*Grammar Representation Requirements for Voice Markup Languages*").

*Ladd et al.* ('336) discloses a confirmation control to accept an answer as a recognized result that is correct (column 15, lines 44 to 59: Figure 5b: Step 456). Lack of confirmation implicitly denies a recognized result, whereupon the process continues to replay a prompt for a current step so as to correct a recognition result. (Figures 5a and 5b: Step 446) However, *Ladd et al.* ('336) omits an attribute related to a confidence level for confirming, accepting or denying, and correcting a recognition result. *WCW Working Draft* teaches grammars for voice markup languages with attributes, where confidence scoring tightens or relaxes the normal rejection constraints to provide content based control of performance. (Sections 4.3 and 5.1) It would have been obvious to one having ordinary skill in the art to provide confidence scoring as taught by *WCW Working Draft* in the voice browser for interactive services of *Ladd et al.* ('336) for a purpose of tightening or relaxing rejection constraints to provide content based control of performance.

### ***Response to Arguments***

Applicants' arguments filed 26 October 2010 have been fully considered but they are not persuasive.

Applicants' amendments to delete the limitations directed to "modality dependent" attributes and "modality dependent" controls are effective to overcome the rejection of claims 1 and 3 to 22 as failing to meet the written description requirement under 35 U.S.C. §112, 1<sup>st</sup> ¶. Moreover, independent claim 1 is now rejected under 35 U.S.C. §102(e) as being anticipated by *Dantzig et al.*, rather than under 35 U.S.C.

§103(a) as being obvious over *Dantzig et al.* in view of *Coffman et al.*, due to the removal of the limitations directed to “modality dependent” attributes from independent claim 1.

Applicants present arguments as to the obviousness of independent claim 1 over *Dantzig et al.* in view of *Coffman et al.* Applicants state that independent claims 12, 23, and 52 present similar elements, and should be allowable for the same reasons. Specifically, Applicants draw attention to the limitations directed to at least the first and second set of attributes being defined on an authoring page. Applicants state that the attributes being defined on an authoring page provides a significant technical advantage because so doing permits an easier extension of existing pages for a legacy application as disclosed by the Specification, Page 18, Lines 12 to 19. Applicants say that the rejection indicates that the first set of attributes is disclosed by *Dantzig et al.* as “a first processing thread comprising a GUI presentation manager, and the second set of attributes as “a second processing thread comprising a speech renderer”. Applicants submit, however, that they find no indication of either of the processing threads being defined on an authoring page for a website, but that the script in *Dantzig et al.* is used to produce HTML and VoiceXML, which the rejection cites as the claimed attributes. Applicants argue that if the script is merely used to produce the attributes, rather than the attributes being present in the script, then it cannot disclose the subject matter that the attributes are “defined on the authoring page”. These arguments are not persuasive.

Firstly, it appears that Applicants are using the term “authoring page” in sense of the conventional prior art of text of a markup language. Thus, the “authoring page”, as Applicants appear to acknowledge, is simply the script of the markup language for generating the attributes, e.g., HTML and VoiceXML. Here, the script of the markup language is equivalent to “the authoring page”, as that term would be conventionally understood. *Dantzig et al.*, in fact, discloses user interfaces that are created and rendered as “single authoring” format, which represent interactive dialogs or conversations between a user and a machine, at Column 2, Lines 15 to 20, and Column 5, Lines 50 to 56. Although *Dantzig et al.* may disclose a modality independent script, it is clear that a VoiceXML document and a GUI document are generated from the modality independent document. Moreover, in the current context, the term “attributes” is being broadly interpreted (in the only manner that can reasonably be construed) as an abstract term suggesting the various textual representations of the markup language that produce the visual and recognition/audible prompting. There is a narrower sense of the term “attributes” as specific parameters within the text of a line of the markup language that produce further limitations on how the markup language is rendered, but this does not appear to be the case here, where the term “attributes” is set forth as broadly relating to visual and audible/recognition renderings. Furthermore, it should be clear to one skilled in the art that *Dantzig et al.* discloses the script for a web page. Specifically, *Dantzig et al.* only discloses the term of a “Web Browser” once at Column 8, Lines 32 to 35, but the term “browser” is repeatedly disclosed throughout the patent. Additionally, the patent generally is disclosed to relate to client devices that are



interconnected to the Internet or wireless networks at Column 1, Lines 25 to 45, and there is further disclosure of a client access device at Column 2, Lines 34 to 38. Thus, it should be reasonably clear that *Dantzig et al.* renders a GUI and VoiceXML on a “web page” for a client/server system.

Secondly, Applicants’ basic argument is found in the statement, “Applicant respectfully submits, however, that if the script is merely used to produce the attributes, rather than the attributes being present in the script, that it cannot disclose the claimed subject matter in which these attributes are ‘defined on the authoring page’”. It is contended that, to some extent, Applicants are merely playing with words here, but to some extent, what Applicants are arguing appears to be technically incorrect. Conventionally, any programming language relies upon sub-routines that are called at the time of execution to determine what the program actually does. *Dantzig et al.* discloses that, although the script is written in a high-level XML programming language, that the modalities for the browser are presented by converting that script into VoiceXML script and a GUI script. At one point, *Dantzig et al.* refers to a ‘mini’ VoiceXML script that is invoked for a component that is returned to a main VXML script. (Column 14, Lines 64 to 67) The fact that *Dantzig et al.* discloses two “threads” from a main renderer for invoking the GUI presentation manager and the speech renderer should not confuse the fact that GUI and speech modalities are defined within the main renderer. (Column 7, Lines 38 to 43: Figure 2) *Dantzig et al.* says that the modality-independent IML script is already given the capability of producing modality-specific representations. (Column 7, Lines 25 to 30) The IML input files have component

names that provide a mechanism to correlate the different modalities presented.

(Column 7, Lines 14 to 19) Thus, although the IML script is written in a higher-level language, component names of the IML script are already defined to enable a plurality of modalities. This is shown in Figures 1 and 2 of *Dantzig et al.*, where the IML script is calling subroutines of UpdateGUI and a transcoder to produce a VXML browser.

*Dantzig et al.* suggests that this is performed using a hash table of IML components by an expanded name and an intermediate file for producing expanded IML component names for names recognizable by the IML GUI renderer, but the actual mechanism for achieving this does not appear to be material. (Column 11, Lines 19 to 28) It is contended that an IML script is an authoring page that is already defined for producing modality-specific attributes even if the IML script is written in a higher-level language.

Thirdly, Applicants' statement of the benefit of permitting easier extension of existing pages in legacy application is not a sufficient advantage to overcome the rejection. Independent claim 1, following Applicants' removal of the limitation directed to "modality dependent" attributes, is now rejected under 35 U.S.C. §102(e), and not under 35 U.S.C. §103(a). Generally, any unanticipated advantages are irrelevant to the rejection under 35 U.S.C. §102(e). Moreover, if anything, writing a program in a higher-level programming language, as is done by *Dantzig et al.*, would similarly make it easier to update/extend the programming functionality of legacy applications. Specifically, *Dantzig et al.* suggests that their invention is intended to address issues where new markup languages are developed for a variety of new user interfaces. (Column 2, Lines

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23 to 26) By writing the script, or 'authoring page', in a higher-level language, *Dantzig et al.* would have the capability to permit old programs to work on new user interfaces.

Therefore, the rejections of claims 1 and 4 to 8 under 35 U.S.C. §102(e) as being anticipated by *Dantzig et al.*; of claims 3, 9 to 46, and 52 under 35 U.S.C. §103(a) as being unpatentable over *Dantzig et al.* in view of *Ladd et al.* ('336); and of claims 47 to 51 under 35 U.S.C. §103(a) as being unpatentable over *Dantzig et al.* in view of *Ladd et al.* ('336), and further in view of *WCW Working Draft*, are proper.

### **Conclusion**

Applicants' amendment necessitated the new ground(s) of rejection presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARTIN LERNER whose telephone number is (571)272-7608. The examiner can normally be reached on 8:30 AM to 6:00 PM Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Martin Lerner/  
Primary Examiner  
Art Unit 2626  
November 2, 2010